MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2017/2018

EBT3016 – TELEMEDICINE TECHNOLOGY

(TE)

12 OCTOBER 2017
9.00 a.m. - 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 2 pages with 4 Questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Question 1

a) Teleradiology is the most common telemedicine specialty used by doctors in many countries. Discuss the need of teleradiology. [7 marks]

b) Describe how telecommunications is used to extend the techniques in delivering radiology services in teleradiology. [10 marks]

c) In a survey conducted by American Well on 2,000 primary care physicians in 2015, telemedicine is regarded as most useful in dermatology. Comment on the suitability of using a teleradiology system for dermatology. [8 marks]

Question 2

a) Briefly explain the four main issues in telemedicine implementation. [8 marks]

b) Explain the legal and ethical issues involved in telemedicine. [8 marks]

c) Explain the typical rule for assessing the appropriate standard of reasonable care in negligence cases involving skilled professionals. [9 marks]

Continued ...

Question 3

a) By definition, security attack is any action that compromises the security information owned by an organization. Give five (5) reasons why would anyone launch a security attack on a healthcare center? [10 marks]

b) Computer intruders rely on poor passwords to gain unauthorized access to a system or network. Suggest suitable access control mechanisms to prevent unauthorized access to a hospital information system. [10 marks]

c) Give one (1) example of a good password with justification. [5 marks]

Question 4

a) The availability of electronic health records is the first essential component in delivering healthcare services through telemedicine. Discuss the secondary use of electronic medical records. [8 marks]

b) The trend in healthcare is going wireless. Why has wireless become the choice of communication in telemedicine nowadays? [10 marks]

c) Discuss the use of wireless personal area network in healthcare. [7 mark]

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